Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently amended) A **medicinal** ~~preparation in~~ powder ~~form~~ for administration through a mucosal membrane, **comprising an admixture of (i) a medicine that has a molecular weight greater than 1000 MW and (ii)** ~~consisting essentially of a high molecular weight medicine and~~ a cationic aminoalkylmethacrylate copolymer**, which** ~~that~~ comprises a dimethylaminoethyl methacrylate, methyl methacrylate, and butyl methacrylate.

2. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 1, further comprising a viscous polymer.

3.-5. (Canceled)

6. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 2, wherein the viscous polymer is hydroxypropylmethyl cellulose.

7. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 1, wherein the medicine ~~of high molecular weight~~ is selected from the group consisting of bioactive peptides and proteins, antibodies, vaccines, and antigens.

8. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 7, wherein the protein is a granulocyte colony-stimulating factor.

9. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 1, wherein the **mucosal membrane** ~~mucosa~~ is nasal mucosa, ocular mucosa, oral mucosa, pulmonary mucosa, vaginal mucosa, gastric mucosa, small intestine mucosa, large intestine mucosa, or rectal mucosa.

10.-12. (Canceled)

13. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 1, wherein the ratio of cationic aminoalkylmethacrylate copolymer to **medicine** ~~high molecular weight drug~~ is less than 2:1.

14. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 13, wherein the percentage weight-by-weight of cationic aminoalkylmethacrylate copolymer in the **medicinal powder** ~~powdered preparation~~ is 0.1 to 90 % (w/w).

15. (Canceled)

16. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 1, wherein the medicine of ~~high molecular weight~~ is selected from the group consisting of calcitonin, insulin, proinsulin, vasopressin, desmopressin, luteinizing hormone, luteinizing hormone-releasing hormone, somatostatin, prolactin, glucagon, gastrin, secretin, kallikrein, urokinase, neurotensin, ~~enkephalin~~, ~~kyotorphin~~, endorphin, endothelin, ~~angiotensin~~, transferrin, atrial natriuretic polypeptide, epithelial growth factor, growth hormone, parathryoid hormone, interferons, interleukins, tumor necrosis factor, leukemia inhibitory factor, hematopoietic stem cell growth factor, erythropoietin, granulocyte colony-stimulating factor, granuloctye macrophage-stimulating factor, macrophage colony-stimulating factor, thrombopoietin, superoxide dismutase, tissue plasminogen activator, antithrombin, blood coagulation factors, anti-IgE antibodies, anti-IGA antibodies, anti-tumor antibodies, antibodies to tumor necrosis factor, anti-interleukin antibodies, HIV-neutralizing antibodies, anti-platelet antibodies, anti-hepatitis virus antibodies, hepatitis vaccines, influenza vaccines, pertussis vaccine, diptheria vaccine, tetanus toxoids vaccine.

17. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 1, wherein said ~~high molecular weight~~ medicine is a protein.

18. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 17, wherein said protein is conjugated to a hapten.

19. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 18, further comprising an adjuvant.

20. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 1, further comprising an adjuvant.

21. (Not entered)

22.-23. (Canceled)

24. (Currently amended) The **medicinal powder** ~~preparation~~ of claim 14, wherein the percentage weight-by-weight of cationic aminoalkylmethacrylate copolymer in the **medicinal powder** ~~powdered preparation~~ is 1 to 50% (w/w).

25. (Currently amended) The **medicinal powder** ~~preparation~~ of claim **9** [[~~1~~]], wherein the **mucosal membrane** ~~mucosa~~ is nasal mucosa.

26. (Withdrawn) A method for enhancing the absorption of a high molecular weight medicine through a mucosal membrane of an individual, comprising (i) formulating a high molecular weight medicine with a cationic aminoalkylmethacrylate copolymer; (ii) preparing a powdered preparation of the formulation; and (iii) administering the powdered formulation via pernasal administration to the individual, wherein the cationic aminoalkylmethacrylate copolymer comprises a dimethylaminoethyl methacrylate, methyl methacrylate, and butyl methacrylate, and wherein the release of the high molecular weight medicine from the formulation is not sustained.

27. (Withdrawn) The method of claim 26, wherein the cationic aminoalkylmethacrylate copolymer is an Eudragit® E copolymer.

28. (Withdrawn) The method of claim 27, wherein the Eudragit® E copolymer is Eudragit® E100.

29. (Canceled)